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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,088	10/28/2003	Mitsuru Iwasaki	2003-1505A	3480
513	7590	07/24/2006	EXAMINER	
WENDEROTH, LIND & PONACK, L.L.P.			COOLMAN, VAUGHN	
2033 K STREET N. W.			ART UNIT	
SUITE 800			PAPER NUMBER	
WASHINGTON, DC 20006-1021			3618	

DATE MAILED: 07/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/694,088

Applicant(s)

IWASAKI ET AL.

Examiner

Vaughn T. Coolman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 2,3 and 5-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4,17 and 18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

The new examiner of record is Travis Coolman. All future correspondence should be addressed to Examiner Coolman.

#### *Claim Rejections - 35 USC § 103*

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

**Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Temmesfeld (US 4,756,279) in view of Suzuki (US 5,090,270).**

[claim 1] Temmesfeld teaches an automotive heat exchanging system including: a heat exchanger (3) mounted in front of an engine (1) and transmission (not shown) supplied with a coolant (see Column 3), an electric fan (6) which is located in a front of vehicle and ensures airflow through heat exchanger (3); a shroud (9, 10) attached to and covering peripheral portions of said electric fan (6) and the heat exchanger (3) to form an air passage inside of said shroud (9,10) for allowing airflow through said heat exchanger (3) to flow toward said automatic transmission', and a shutter (4,5) disposed in and attached at a periphery thereof to said shroud to open and close said air passage; a controller which controls opening and closing of the shutter (4,5) based on engine temperature.

Temmesfeld does not teach an oil temperature sensor specifically. Suzuki teaches a control system including for an automatic transmission including, an engine, a controller (23) wherein, an oil temperature sensor (23) sensing a temperature of oil in said automatic

transmission and outputs an oil temperature signal; a controller which controls opening and closing of a by-pass via a solenoid (19) based on the oil temperature signal from said oil temperature sensor so as to indirectly control the temperature of the oil in said automatic transmission. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention taught by Temmesfeld with controller responsive to an oil temperature sensor, since the modification would provide the advantage of, as discussed by Suzuki, enhancing the engagement characteristics of transmission friction elements due to the tendency of said elements to vary in efficiency in relation to the temperature of the transmission oil.

**Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Temmesfeld (US 4,756,279) in view of Suzuki (US 5,090,270) as applied to claim 1 above, and further in view of Nixon (US 4,476,820).**

[claim 4] Temmesfeld (US 4,756,279) in view of Suzuki teaches all aspects of the claimed invention as discussed above for claim 1, including the electric fan disposed behind the radiation, except for the shutter being located behind the electric fan.

Nixon teaches an engine compartment including an electric fan, radiator and shroud arrangement, wherein a shutter (41) is disposed directly in front of the engine. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the shutter position of the invention taught by Temmesfeld modified by Suzuki, such that the shutter is disposed directly in front of the engine, to maintain a minimum temperature and enhance the cooling efficiency of the radiator.

**Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Temmesfeld (US 4,756,279) in view of Suzuki (US 5,090,270) as applied to claim 1 above, and further in view of Tsuchikawa et al (US 4,539,943).**

[claims 17 and 18] Temmesfeld in view of Suzuki teaches all aspects of the claimed invention as discussed above for claim 1, except the heat exchanger including a condenser and radiator at the rear of the condenser.

Tsuchikawa et al teaches an engine compartment including: a heat exchanger comprising a radiator (2) at the rear of a condenser (3) and a shroud (4) having sidewalls, see Figure 2. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a radiator/condenser arrangement as well as a shroud having side walls to further deflect air flow, thereby improving heat dissipation for the vehicle.

### ***Response to Arguments***

Applicant's arguments filed 04/14/2006 have been fully considered but they are not persuasive.

In response to applicant's argument that the Suzuki reference does not teach the opening and closing of a shutter so as to control the temperature of the oil in the automatic transmission, the examiner is not relying on Suzuki for the shutter element that is disclosed by Temmesfeld. Suzuki teaches the use of an oil temperature sensor to activate electro-mechanical systems in order to control the temperature of the oil in an automatic transmission.

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Examiner notes that the heat transfer equation, which is old and well known in the vehicle art, regarding forced convection heat transfer includes mass flow rate and temperature. By controlling the mass flow rate, as taught by Suzuki, the temperature will also be controlled.

Furthermore, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

In response to applicant's arguments against the references individually (see page 8), one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vaughn T. Coolman whose telephone number is (571) 272-6014.

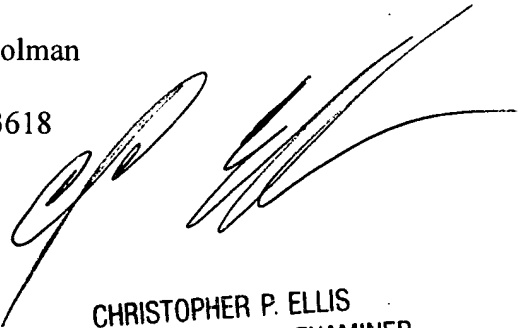
The examiner can normally be reached on Monday thru Friday, 8am-6pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Ellis can be reached on (571) 272-6914. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
vtc  
06/26/06

Travis Coolman  
Examiner  
Art Unit 3618

  
CHRISTOPHER P. ELLIS  
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